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**APPENDIX B**

**USGS TOPOGRAPHIC MAP**

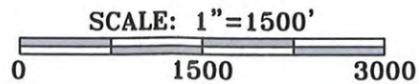
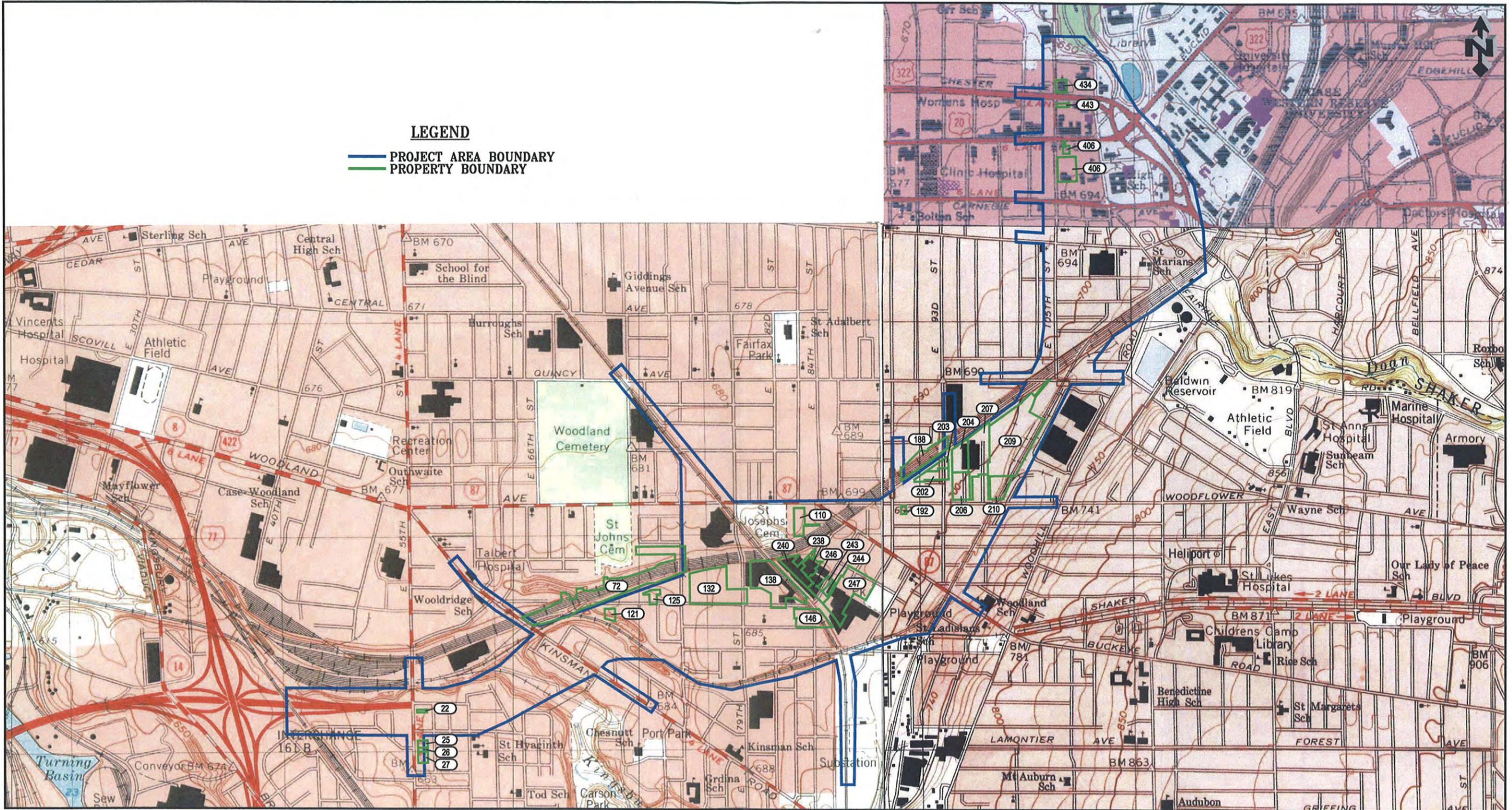
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# USGS TOPOGRAPHIC MAP

## 1994 CLEVELAND SOUTH, 1994 SHAKER HEIGHTS, 1994 EAST CLEVELAND, OHIO QUADRANGLES

**LEGEND**

— PROJECT AREA BOUNDARY  
— PROPERTY BOUNDARY



1:2009103113781411 Paper CADWINS.PH: 09113: 10/09/04: dwg: mckelvey: Mar. 20, 2011

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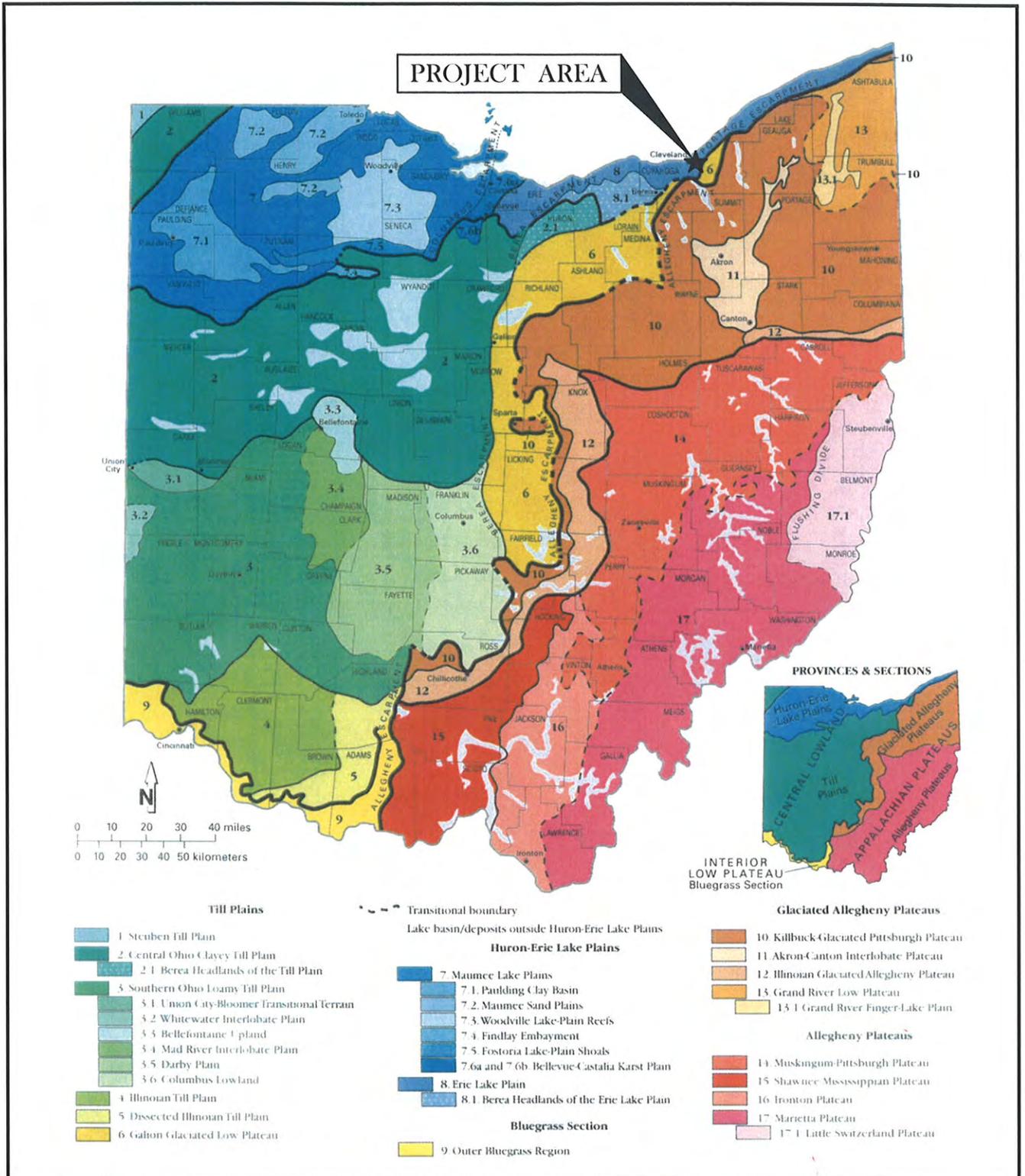
**APPENDIX C**

**PHYSIOGRAPHIC REGIONS MAP OF OHIO**

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# PHYSIOGRAPHIC REGIONS OF OHIO

1/2009/09113/Phase1\_Report/ADMIN/SP1-09113\_PHYSIO.dwg Monday, Feb 03, 2011



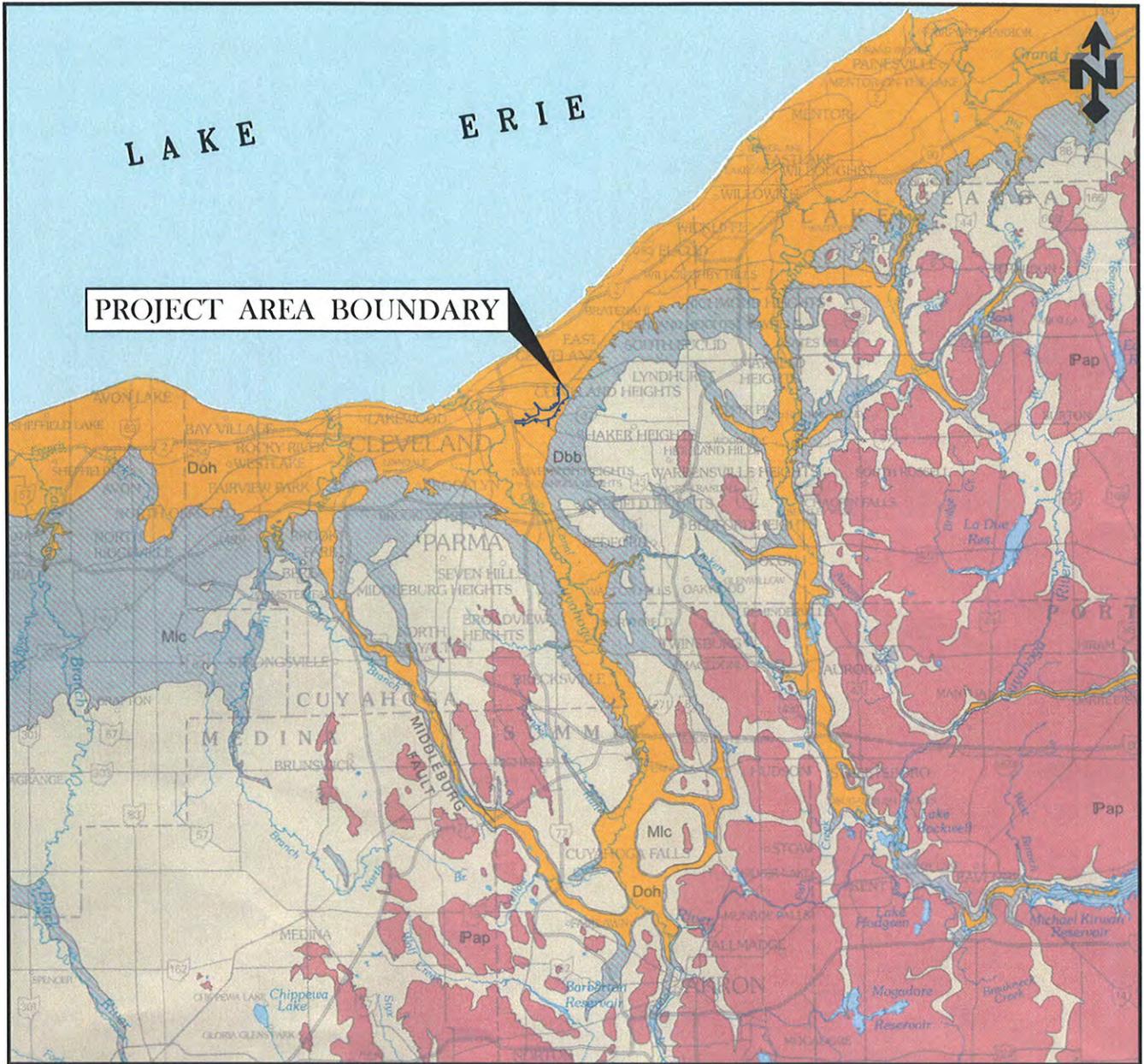
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**APPENDIX D**

**GEOLOGIC MAP OF OHIO**

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# 2006 BEDROCK GEOLOGIC MAP OF OHIO



PROJECT AREA BOUNDARY

## LEGEND



Doh

**Ohio Shale (Upper Devonian)** (mapped interval includes Olenitangy Shale south of central Delaware County)—Unit consists generally of three members, in descending order: Cleveland, Chagrin, and Huron Members. Cleveland Member, shale; black; thickest in north-central portion of state; thins south and eastward; absent in northeastern portion of state. Chagrin Member, shale, siltstone, and very fine-grained sandstone; gray to greenish gray; thickest in northeastern portion of state; grades into underlying and overlying black shale members; thins southwestward, becomes Three Lick Bed in southern portion of state. Huron Member, shale; mostly black; carbonaceous; calcareous concretions common in lower portion. Olenitangy Shale, mostly upper portion; thin; present but not mapped as separate unit south of central Delaware County; absent on Bellefontaine Outlier; see Olenitangy Shale for description. Unit structurally deformed in Serpent Mound Impact Structure (see fig. 3).

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**APPENDIX E**

**USGS BEDROCK TOPOGRAPHIC MAP**

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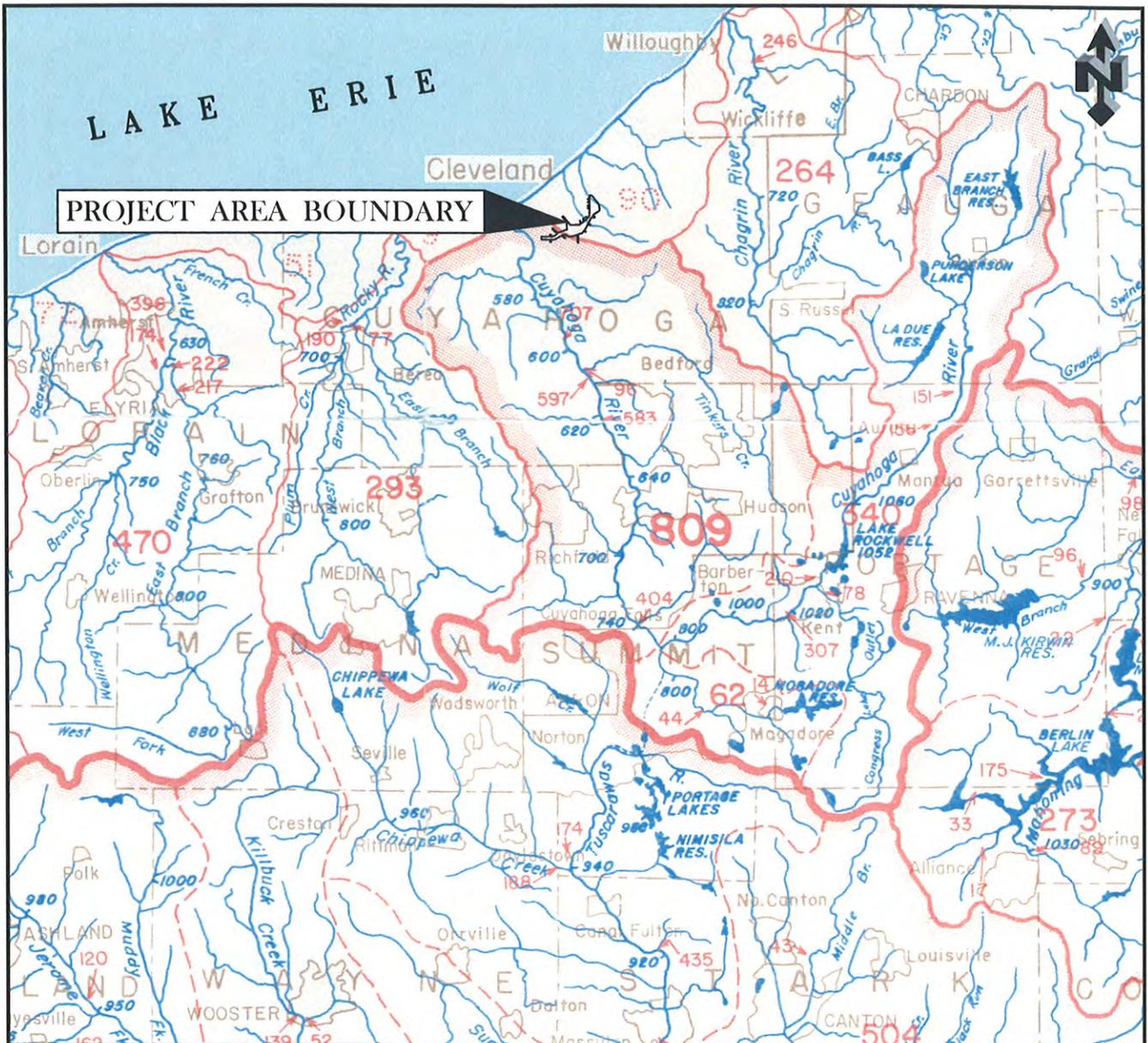
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**APPENDIX F**

**PRINCIPAL STREAMS AND THEIR DRAINAGE AREAS MAP**

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# PRINCIPAL STREAMS AND DRAINAGE AREAS



## LEGEND

Areas of drainage basins, in square miles, are shown by red figures as follows:

- 1757** Areas enclosed by shaded red lines
- 517** Areas enclosed by unshaded red lines
- 313** Auxiliary land areas within the limits of the State.
-  **6715** Drainage areas above points indicated by arrows



Approximate low-water elevation in feet above sea level.



Navigation lock and dam.



Reservoir



Selected urbanized areas, communities, and county seats chosen to aid in map orientation.

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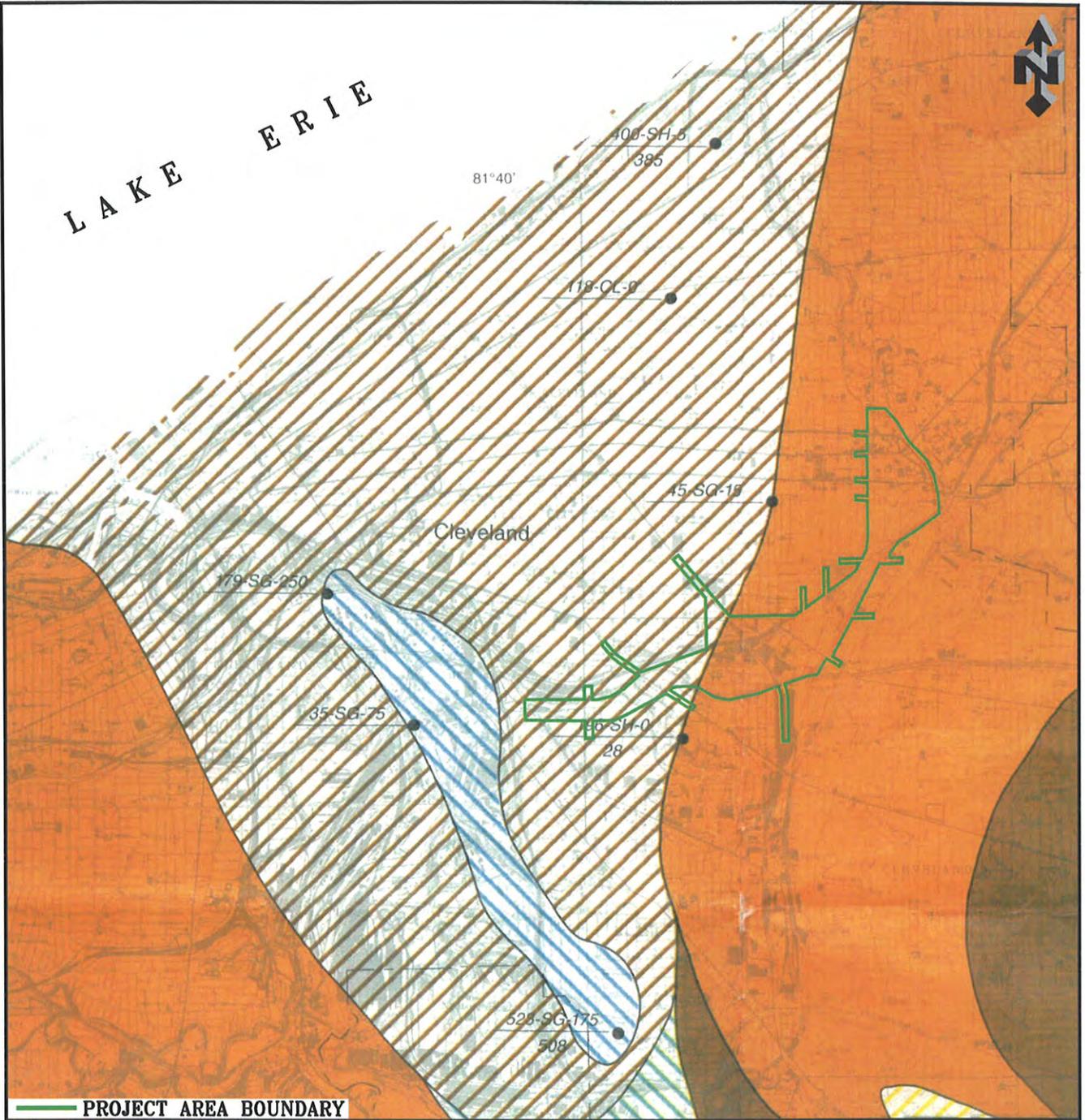
**APPENDIX G**

**CUYAHOGA COUNTY GROUND WATER RESOURCES MAP**

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1:\2009\049113\Phase 1\Report\CAD\DWG\SP1-09113.GRD\WAT.dwg plotat Apr 05, 2011

# GROUND WATER RESOURCES MAP 1992 CUYAHOGA COUNTY, OHIO



**PROJECT AREA BOUNDARY**

## LEGEND

AREAS IN WHICH 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED



Buried valleys contain 200 to 300 feet of fine sand, silt, and clay. Drilled wells yield meager supplies unless encountering thin, isolated sand and gravel lenses.

AREAS IN WHICH LESS THAN 3 GALLONS PER MINUTE MAY BE DEVELOPED



Impermeable deposits, basically clay overlaying shale or shaly sandstone, provide a very poor area for even minimal domestic supplies. Brackish water and dry wells are common. Storage is necessary to supply peak demands.

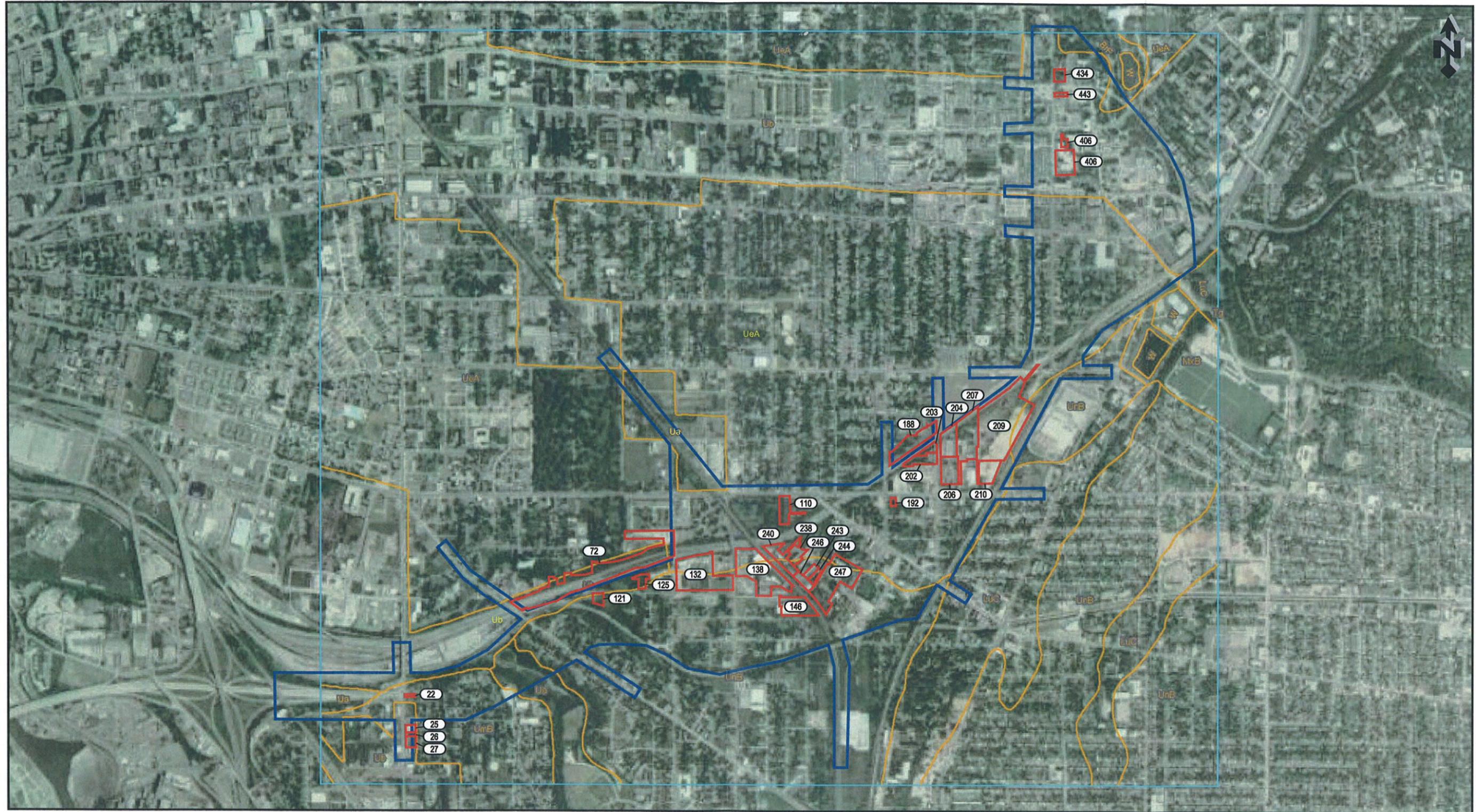
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**APPENDIX H**

**SOIL SURVEY MAP**

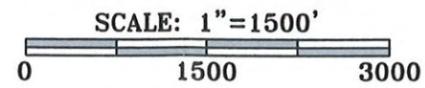
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# SOIL SURVEY MAP CUYAHOGA COUNTY



### LEGEND

- PROJECT AREA BOUNDARY
- PROPERTY BOUNDARY



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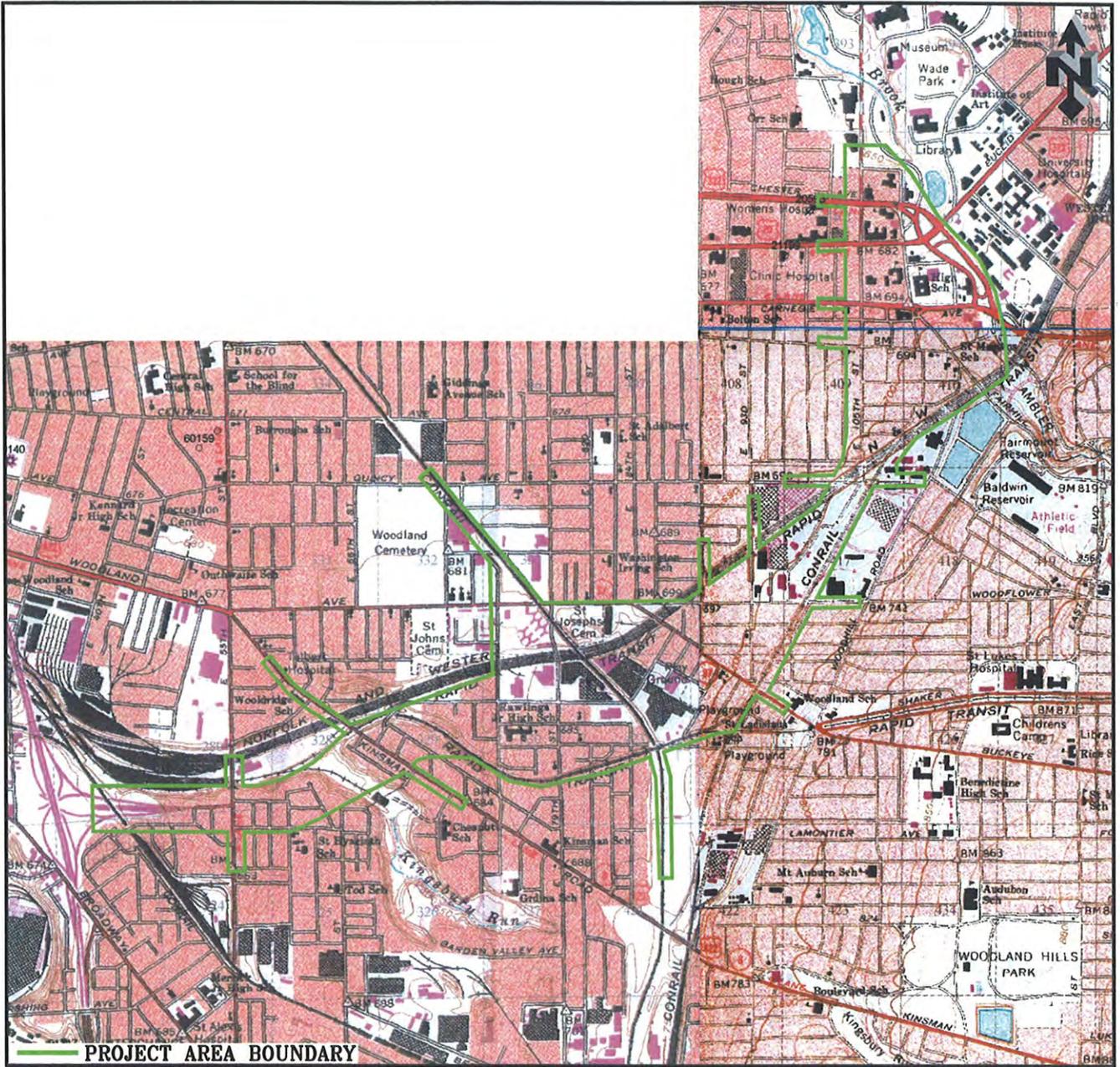
**APPENDIX I**

**ODNR OIL AND GAS WELL MAP**

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# OIL AND GAS WELL MAP

## 1983 CLEVELAND SOUTH, 1983 SHAKER HEIGHTS 1983 EAST CLEVELAND, OHIO QUADRANGLE



**PROJECT AREA BOUNDARY**

### WELL SYMBOLS

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>★ UNKNOWN STATUS</li> <li>⊗ BRINE FOR DUST CONTROL</li> <li>⊗ COALBED METHANE</li> <li>⊗ DRY HOLE</li> <li>⊗ DRY HOLE WITH GAS SHOW</li> <li>⊗ DRY HOLE WITH OIL AND GAS SHOW</li> <li>⊗ DRY HOLE WITH OIL SHOW</li> <li>⊗ EXPIRED PERMIT LOCATION</li> <li>⊗ GAS</li> <li>⊗ GAS WITH OIL SHOW</li> <li>⊗ GAS SHOW</li> </ul> | <ul style="list-style-type: none"> <li>⊗ GAS AND OIL SHOW</li> <li>⊗ INJECTION</li> <li>⊗ LOST HOLE</li> <li>⊗ OBSERVATION</li> <li>⊗ OIL AND GAS CONVERTED TO WATER</li> <li>● OIL</li> <li>⊗ OIL AND GAS</li> <li>⊗ OIL WITH GAS SHOW</li> <li>● OIL SHOW</li> <li>○ PERMITTED LOCATION</li> <li>⊗ PLUGGED BRINE FOR DUST CONTROL</li> </ul> | <ul style="list-style-type: none"> <li>⊗ PLUGGED GAS</li> <li>⊗ PLUGGED GAS WITH OIL SHOW</li> <li>⊗ PLUGGED INJECTION</li> <li>● PLUGGED OIL</li> <li>⊗ PLUGGED OIL AND GAS</li> <li>⊗ PLUGGED OIL WITH GAS SHOW</li> <li>⊗ RADIOACTIVE TOOL LOST IN HOLE</li> <li>⊗ SOLUTION MINING</li> <li>⊗ GAS STORAGE</li> <li>⊗ STRATIGRAPHY TEST</li> <li>● WATER SUPPLY</li> </ul> |
|--|--|--|

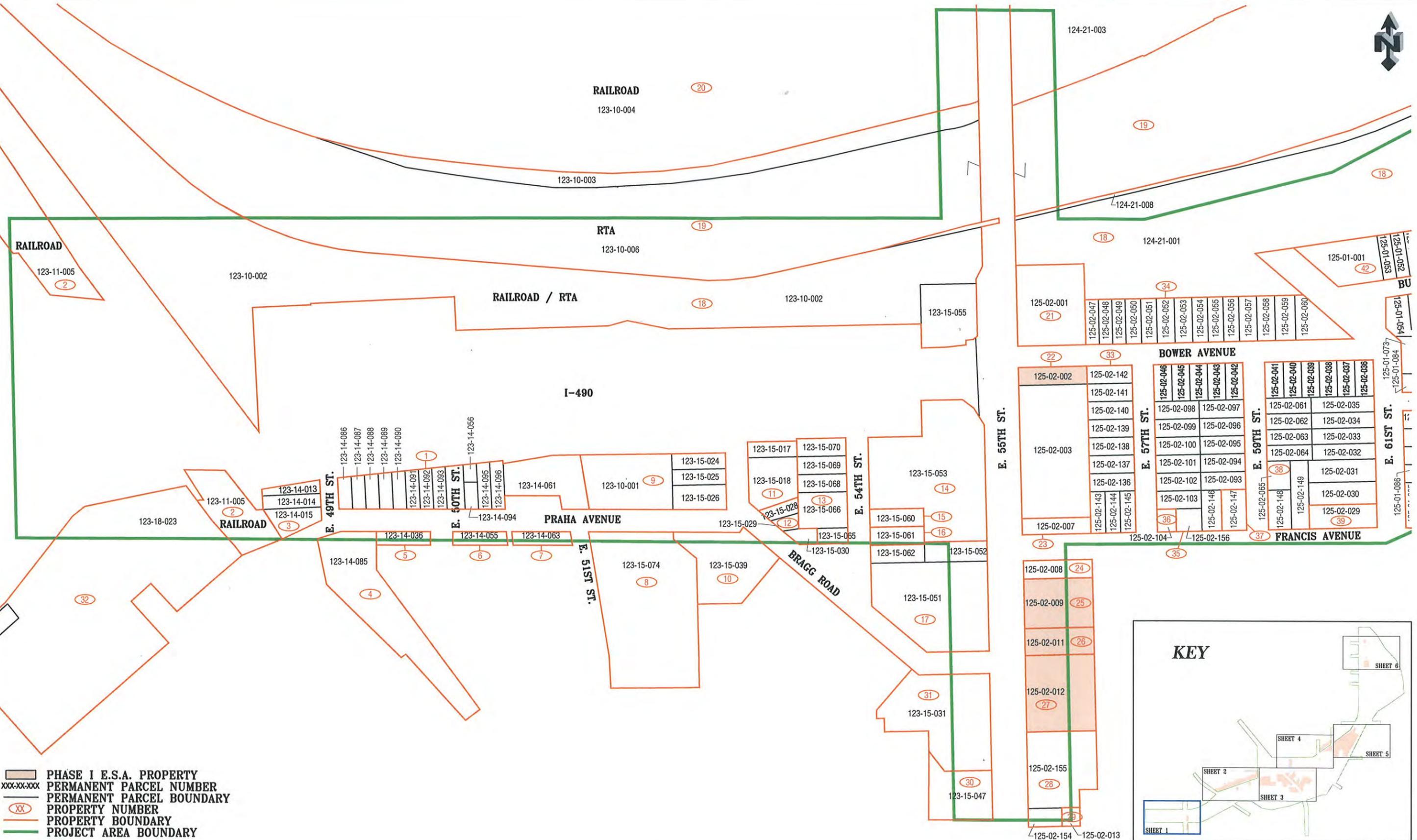
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**APPENDIX J**

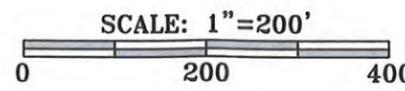
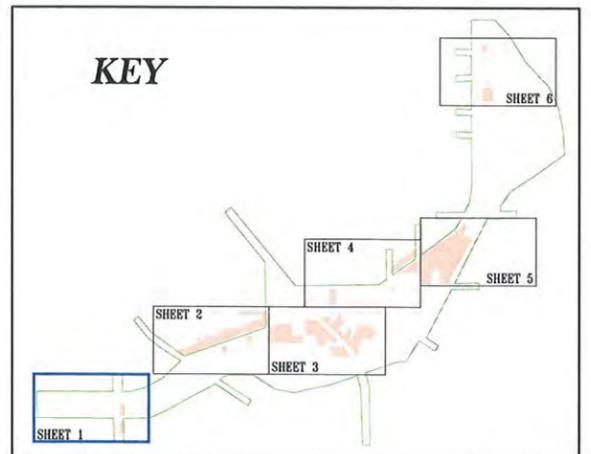
**CURRENT TAX MAP**

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1/20/2019 10:13 PM Parcel Report C:\ADMIN\GIS\PH1-14913-3-SS-E-APP-DWG-Main.dwg Mar-30-2011



 PHASE I E.S.A. PROPERTY  
 PERMANENT PARCEL NUMBER  
 PERMANENT PARCEL BOUNDARY  
 PROPERTY NUMBER  
 PROPERTY BOUNDARY  
 PROJECT AREA BOUNDARY

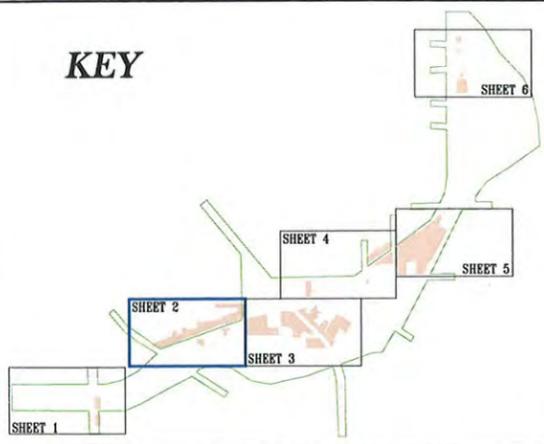


SHEET 1 OF 6  
 PROPERTY #22, 25, 26 & 27  
 OPPORTUNITY CORRIDOR  
 CLEVELAND, CUYAHOGA COUNTY, OHIO

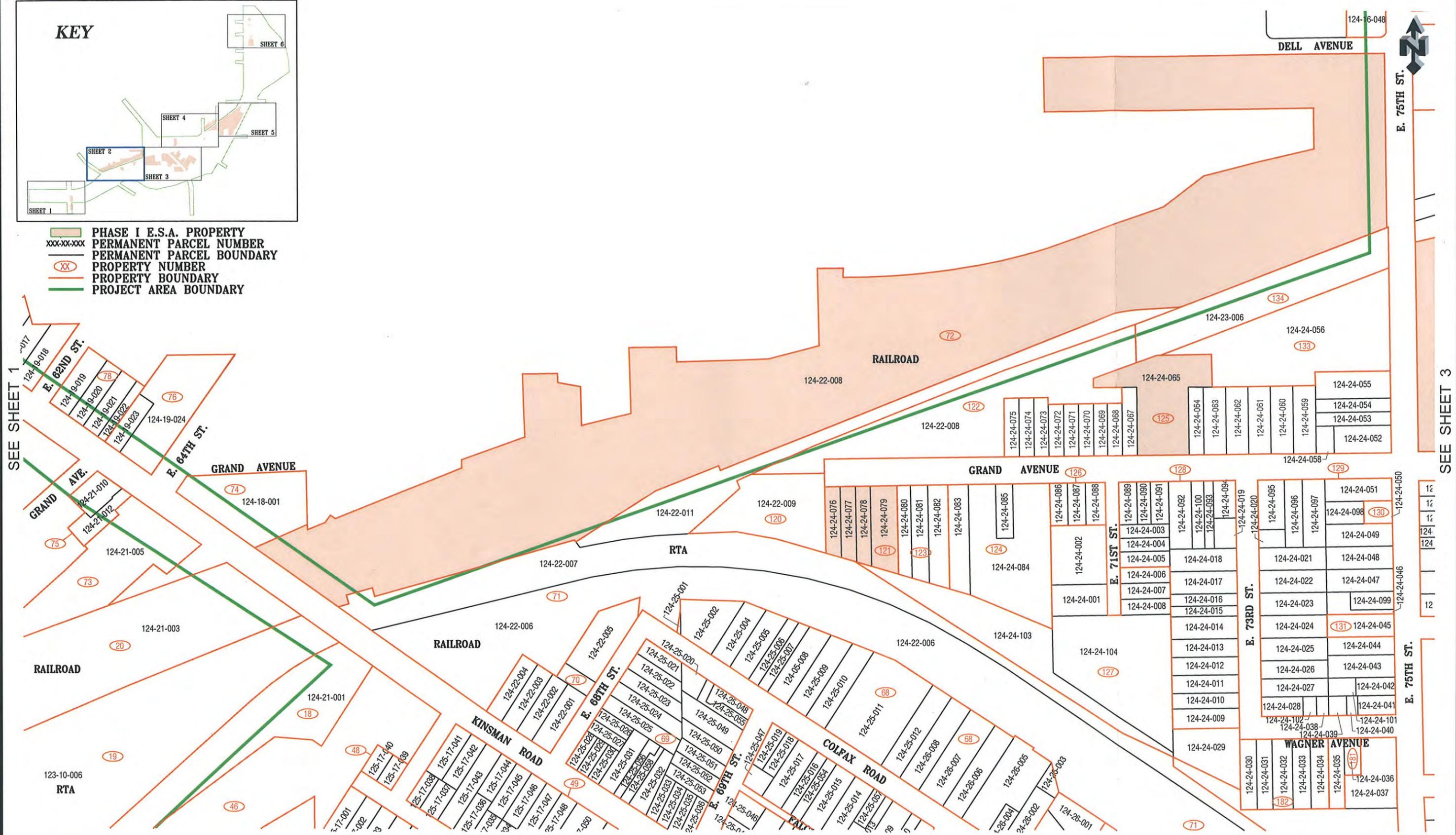


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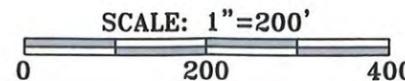


- PHASE I E.S.A. PROPERTY
- PERMANENT PARCEL NUMBER
- PERMANENT PARCEL BOUNDARY
- PROPERTY NUMBER
- PROPERTY BOUNDARY
- PROJECT AREA BOUNDARY



SEE SHEET 1

SEE SHEET 3

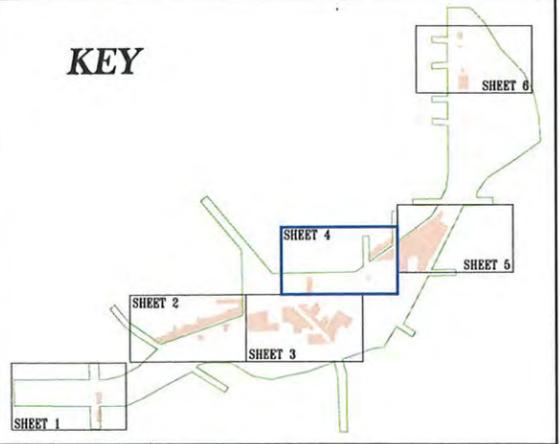


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 CLEVELAND, CUYAHOGA COUNTY, OHIO

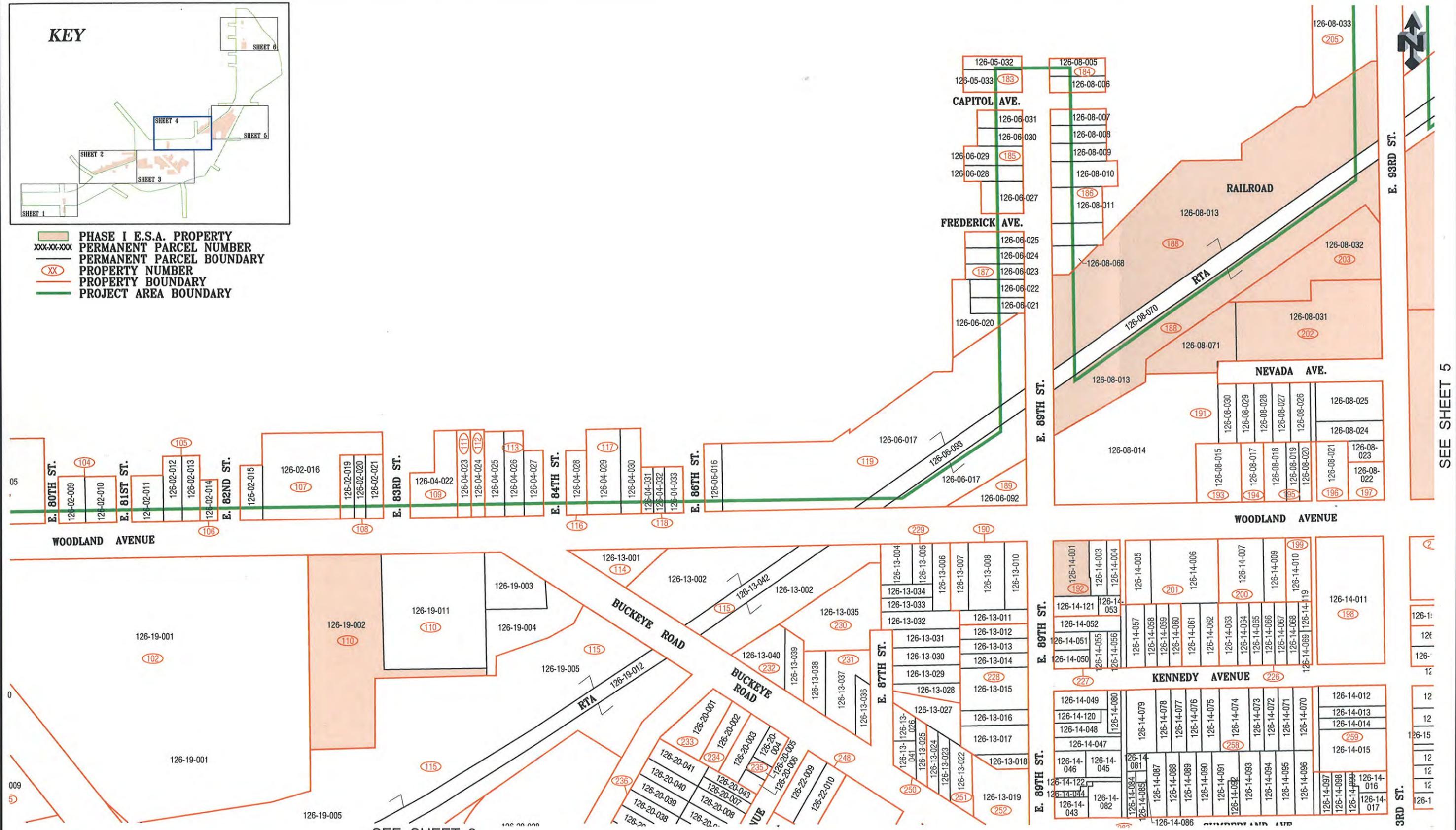


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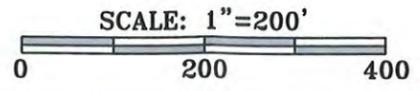
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- PERMANENT PARCEL BOUNDARY
- PROPERTY NUMBER
- PROPERTY BOUNDARY
- PROJECT AREA BOUNDARY



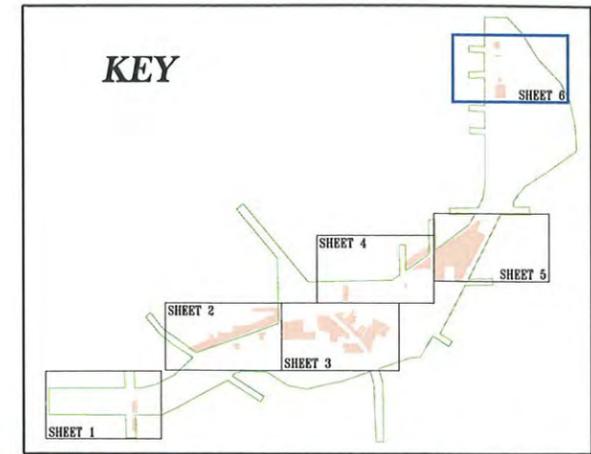
SEE SHEET 5



SHEET 4 OF 6  
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 CLEVELAND, CUYAHOGA COUNTY, OHIO

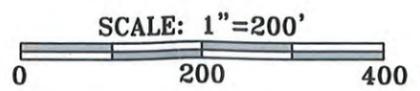


1:20091913 Phase I Report CADWISSPH1-09113-Phase I MAP SWG mshw/rev Feb 24, 2011



KEY

- PHASE I E.S.A. PROPERTY
- PERMANENT PARCEL NUMBER
- PERMANENT PARCEL BOUNDARY
- PROPERTY NUMBER
- PROPERTY BOUNDARY
- PROJECT AREA BOUNDARY



SHEET 6 OF 6  
 PROPERTY # 406, 434 & 443  
 OPPORTUNITY CORRIDOR  
 CLEVELAND, CUYAHOGA COUNTY, OHIO

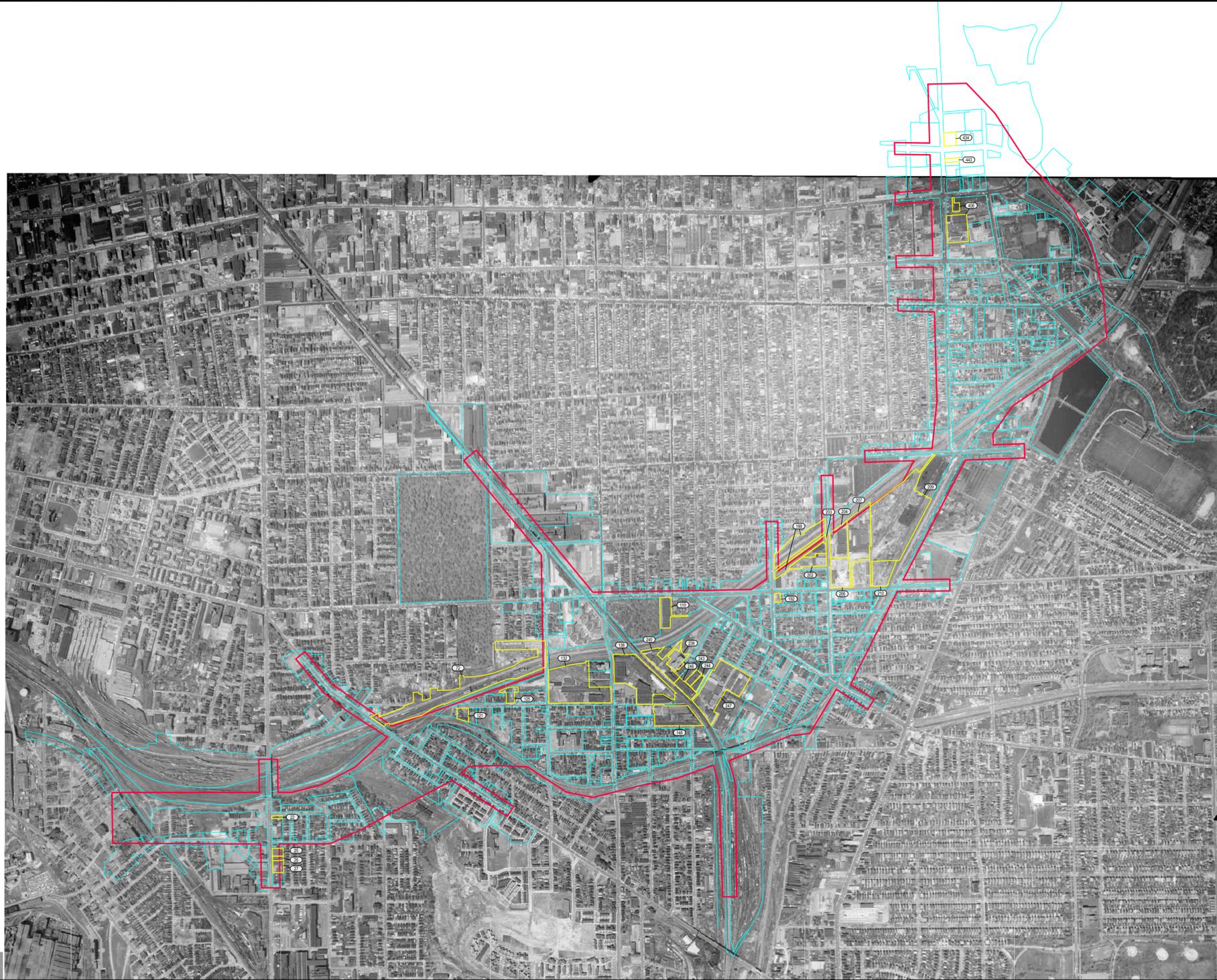
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**APPENDIX K**

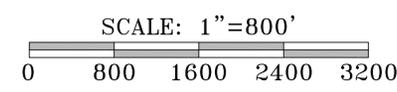
**AERIAL PHOTOGRAPHS**

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# 1963 AERIAL PHOTOGRAPH



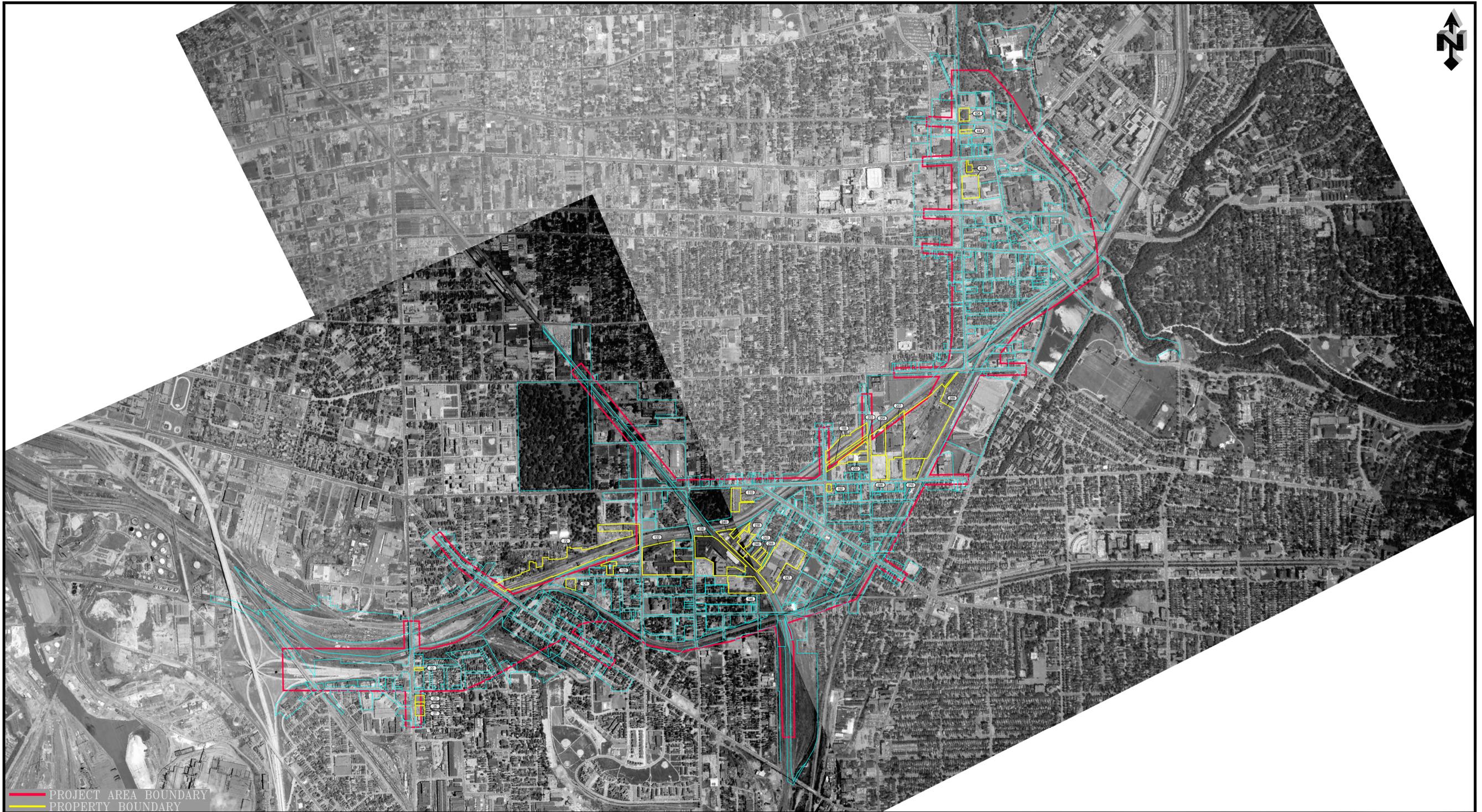
PROJECT AREA BOUNDARY  
PROPERTY BOUNDARY



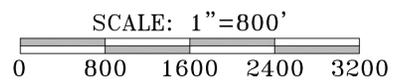
OPPORTUNITY CORRIDOR  
CLEVELAND, CUYAHOGA COUNTY, OHIO

13009109113Phase1ReportCADWSSPH1-09113-AB-03-GWA.dwg April 1, 2011

# 1973 AERIAL PHOTOGRAPH

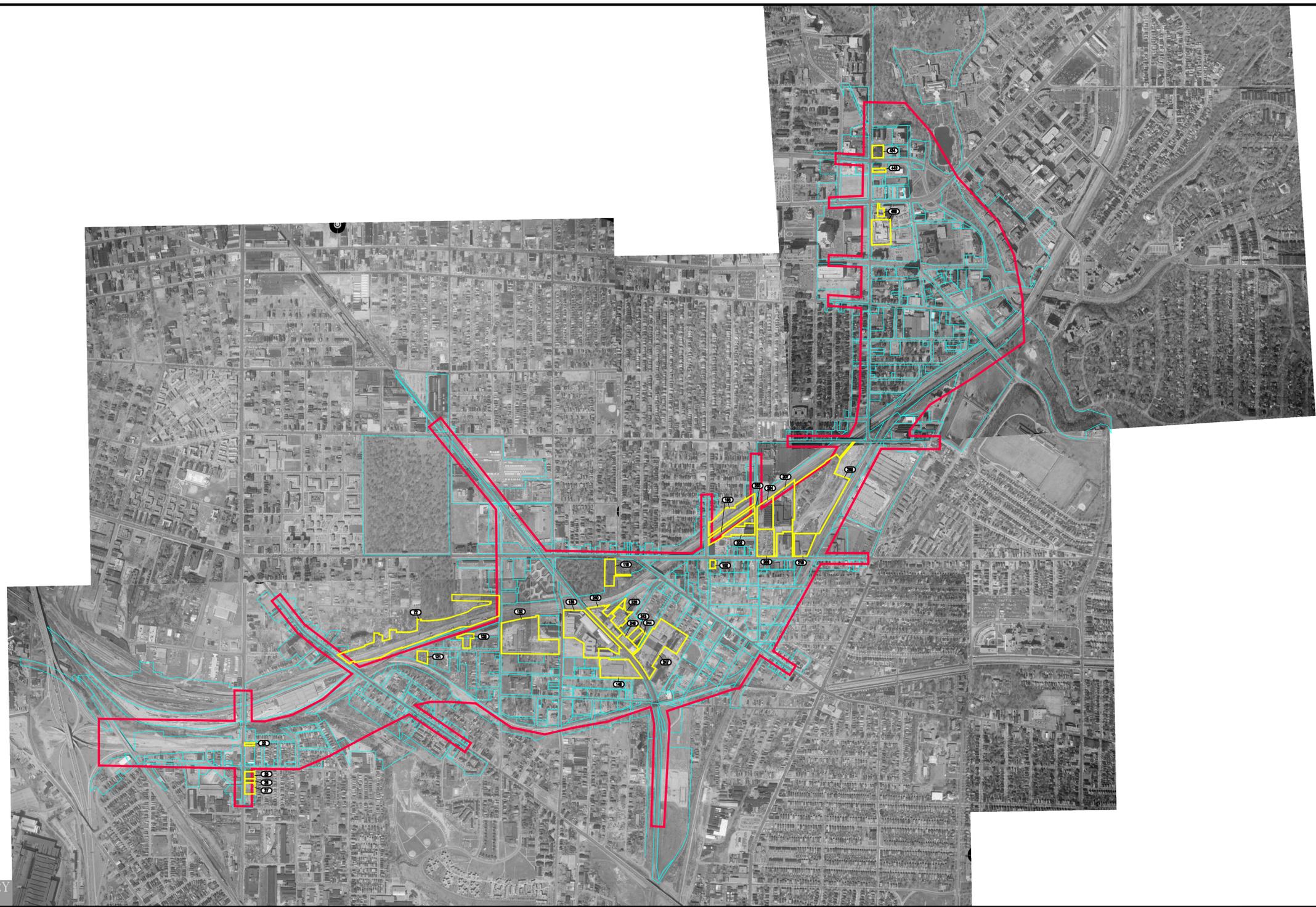


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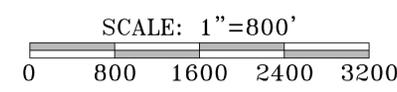


OPPORTUNITY CORRIDOR  
CLEVELAND, CUYAHOGA COUNTY, OHIO

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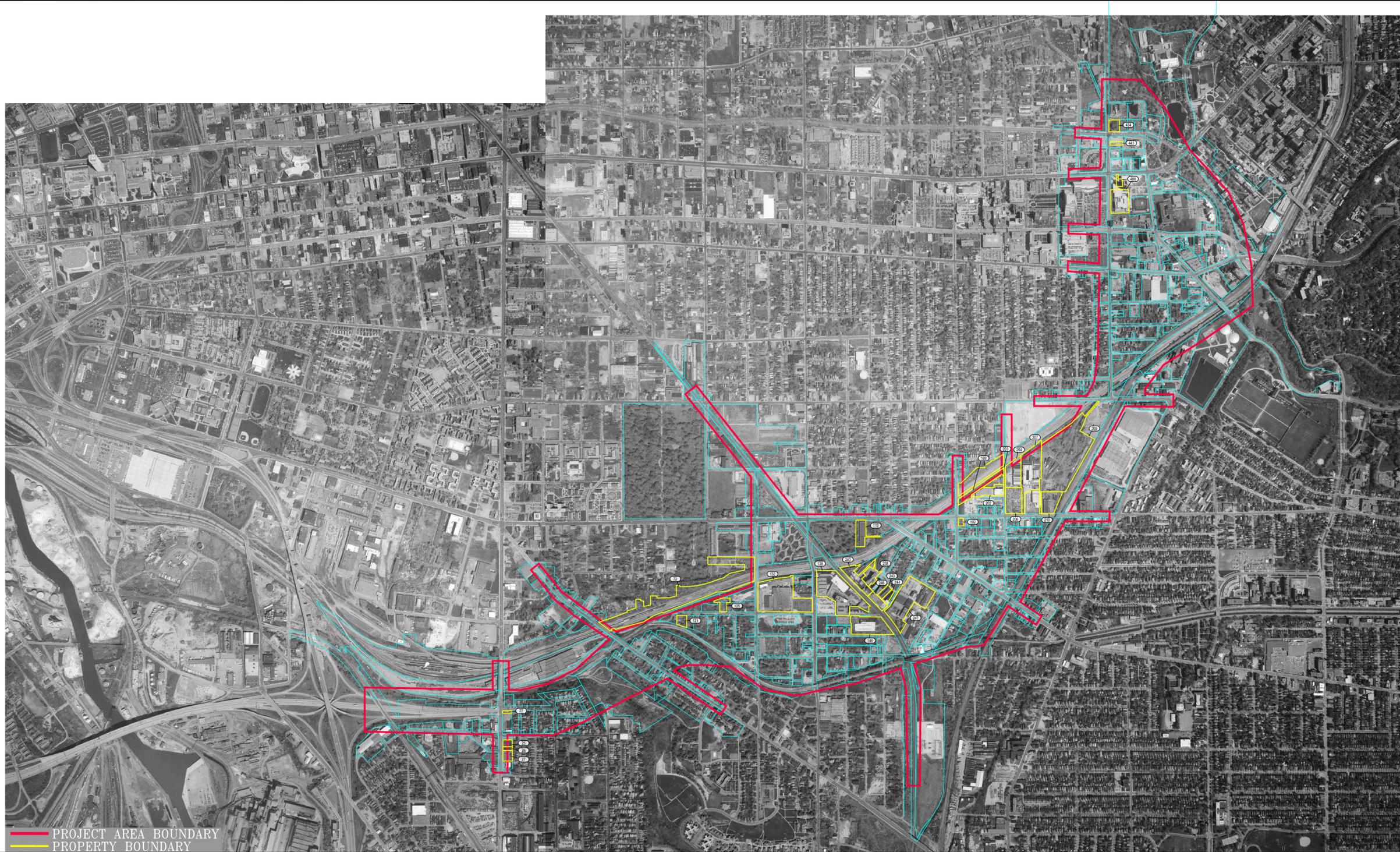
PROJECT AREA BOUNDARY  
PROPERTY BOUNDARY



OPPORTUNITY CORRIDOR  
CLEVELAND, CUYAHOGA COUNTY, OHIO

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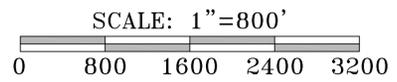
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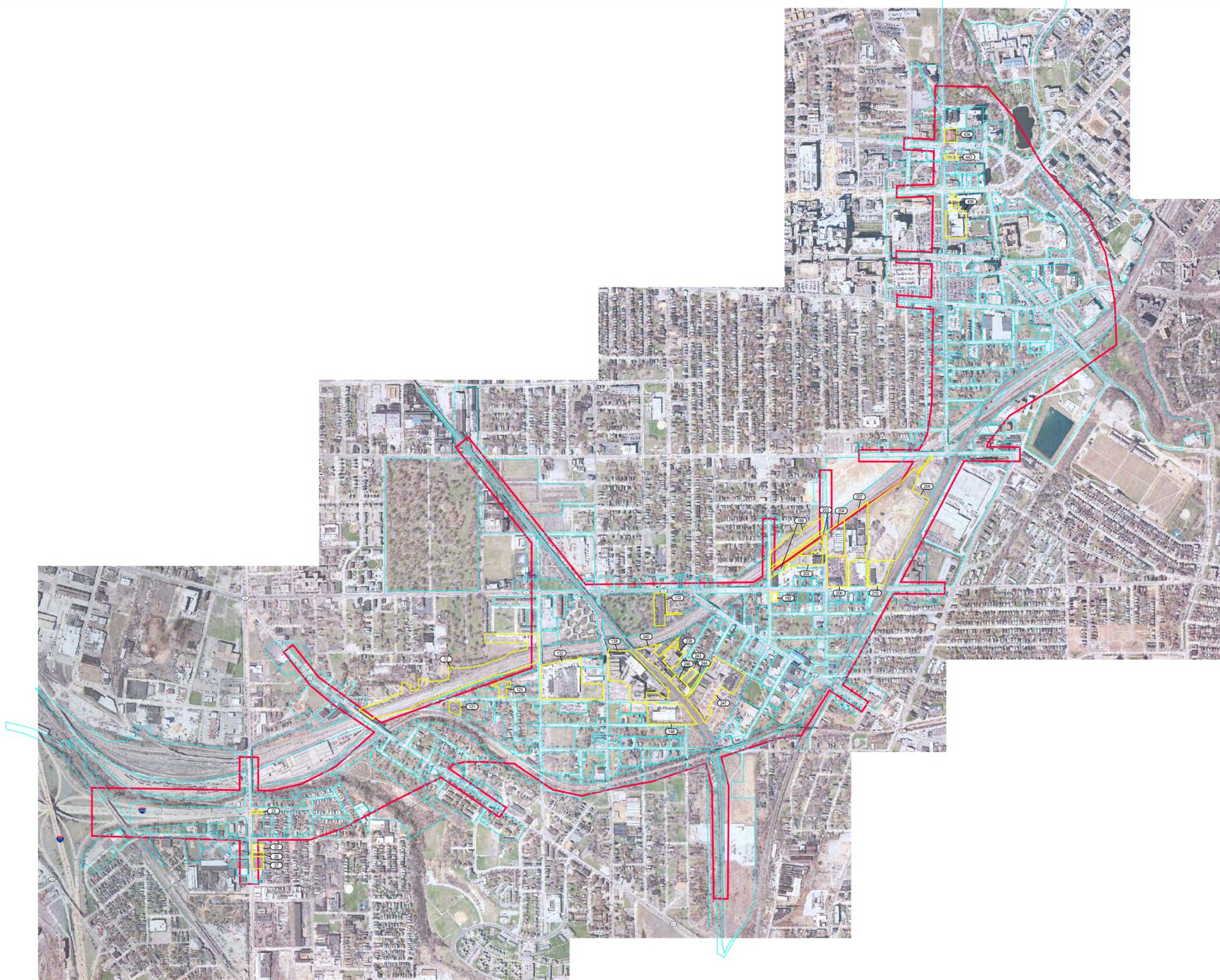


HzW ENVIRONMENTAL  
CONSULTANTS, LLC



OPPORTUNITY CORRIDOR  
CLEVELAND, CUYAHOGA COUNTY, OHIO

# 2008 AERIAL PHOTOGRAPH



PROJECT AREA BOUNDARY  
PROPERTY BOUNDARY



SCALE: 1"=800'  
0 800 1600 2400 3200

OPPORTUNITY CORRIDOR  
CLEVELAND, CUYAHOGA COUNTY, OHIO